





IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Marek T. Wlodarczyk, et al.

October 15, 2003

Serial No.:

10/030,260

Art Unit: 2855

Filed:

04/12/2002

Examiner: Jermaine L. Jenkins

For:

TEMPERATURE COMPENSATED FIBER-OPTIC PRESSURE SENSOR

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

RESPONSE TO EXAMINER'S ACTION DATED APRIL 15, 2003

Sir:

Claims 1-4 have been rejected as anticipated by Wlodarczyk Patent No. 5,600,070. Reconsideration is respectfully requested in view of the following considerations.

Independent claim 1, in the five lines beginning with "the improvement comprising," is broadly directed to selecting the materials of the sensors such that the fiber-optic tip to diaphragm distance changes to compensate for temperature-induced changes in sensor sensitivity and offset dependence.

The Specification in the Summary and in the Preferred Embodiments teaches two different methods with two different compensation results, neither of which are taught in the previous Wlodarczyk patent cited by the examiner. The Wlodarczyk patent teaches changes in materials and changes in distance between the fiber-optic tip and the diaphragm. The Wlodarczyk patent does not teach compensation or correction for temperature-induced changes in the sensor sensitivity and offset dependence that applicants teach in this application in the Preferred Embodiments.

Applicants' Preferred Embodiments make clear that selecting the proper

combination of materials with their differing thermal coefficients of expansion is a non-

trivial engineering design with two different constructions possible, depending on the sensor

sensitivity and offset dependence results desired. The specific two different sensor

constructions are set forth in dependent claims 2 and 3. The Wlodarczyk patent does not

even suggest the further improvements set forth in this application and claimed in

independent claim 1 or dependent claims 2 and 3.

The examiner's statement with respect to claim 4 at the top of page 3 of the

examiner's action is incorrect. It is not only not inherent for the fiber tip to diaphragm

distance to change to zero, it is very undesirable for contact to occur, as fully explained in

the Wlodarczyk patent. The Wlodarczyk patent describes various sensor modifications in

construction to minimize damage when overpressures on the sensor cause diaphragm

contact with the fiber tip.

Applicants' claim 4 specifies that the "distance change is substantially zero over

varying temperature changes," not that the distance changes to substantially zero. These are

entirely different engineering concepts.

In view of the above comments, claims 1-4 are believed allowable.

Respectfully submitted,

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Approved for use through 9/30/00. OMB 0651-0031

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PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a) Docket Number (Optional) 99–1200US				Î
In re Application of Marek T. Wlodarczyk et al.				
Application Number 10/030,260 Filed 04/12/2002				-
For TEMPERATURE COMPENSATED FIBER OPTIC PRE				URE
	Group Art Unit 2855	Examiner Jermai	ne L. Jenkins	
This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a response in the above identified application.				
The requested extension and ap (check time period desired):	propriate non-s	mall-entity fee are	as follows	
One month (37 CFR 1.	.17(a)(1))		\$	
Two months (37 CFR	1.17(a)(2))		\$	
Three months (37 CFR 1.17(a)(3))			\$ 950.00	
Four months (37 CFR	Four months (37 CFR 1.17(a)(4))			
Five months (37 CFR 1	I.17 (a)(5))		\$	·
Applicant is a small entity under 37 CFR 1.9 and 1.27, therefore the fee amount shown above is reduced by one-half, and the resulting fee is: \$ 475.00 A small entity statement under 37 CFR 1.27:				
X is enclosed.				
has already be	 en filed in this a	ipplication.	10	
	A check in the amount of the fee is enclosed.			
X A check in the amount of the fee is enclosed. The Commissioner has already been authorized to charge fees in this application to a Deposit Account. The Commissioner is hereby authorized to charge any fees which may be required or credit any overpayment to Deposit Account				RECEIVED
Number . I have enclosed a duplicate copy of this sheet.				
I am the assignee of record of the entire interest.				
applicant.				8
\overline{X} attorney or agent of record.				260 475.00 0P
attorney or agent under 37 CFR 1.34(a). Registration number if acting under 37 CFR 1.34(a).				100302
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Date		James M. Dein	Signature	8
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10/21/2003